

What is claimed is:

1. A computer-implemented method for executing an untrusted program,
comprising:
establishing a limited environment, said limited environment comprising at least
5 one mock resource;
executing at least a portion of an untrusted program within said limited
environment; and
examining said limited environment after execution of at least said portion of said
untrusted program to check for undesirable behavior exhibited by said untrusted program.
10
2. The method of claim 1, where said limited environment precludes access
to actual resources, which if altered or accessed by said untrusted program, may lead to
undesirable consequences.
- 15 3. The method of claim 1, wherein said limited environment comprises a
shell in a UNIX operating system environment.
4. The method of claim 1, wherein examining said mock environment
comprises:
20 determining whether said mock resource has been deleted.
5. The method of claim 1, wherein examining said mock environment
comprises:

determining whether said mock resource has been renamed.

6. The method of claim 1, wherein examining said mock environment comprises:

5 determining whether said mock resource has been moved.

7. The method of claim 1, wherein examining said mock environment comprises:

determining whether said mock resource has been altered.

10

8. The method of claim 7, wherein said mock resource has a parameter associated therewith which changes when said mock resource is altered, and wherein determining whether said mock resource has been altered, comprises:

determining whether said parameter has changed.

15

9. The method of claim 8, wherein said parameter is a time value indicating when said mock resource was last updated.

10. The method of claim 1, wherein examining said mock environment comprises:

20

determining whether said mock resource has been accessed.

11. The method of claim 10, wherein said mock resource contains one or more sets of content, wherein said untrusted program executes in a particular portion of memory, and wherein determining whether said mock resource has been accessed comprises:

5 searching said particular portion of said memory for at least one of said one or more sets of content.

12. The method of claim 1, further comprising:
providing information indicating behavior exhibited by said untrusted program.

10

13. The method of claim 12, wherein said information comprises indications of undesirable behavior exhibited by said untrusted program.

15

14. The method of claim 1, further comprising:
determining whether said untrusted program has exhibited undesirable behavior;
and
in response to a determination that said untrusted program has exhibited undesirable behavior, taking corrective action.

20

15. The method of claim 14, wherein taking corrective action comprises:
deleting said untrusted program.

16. The method of claim 14, wherein taking corrective action comprises:

providing a warning to a user.

17. A computer readable medium comprising instructions which, when executed by one or more processors, cause the one or more processors to execute an untrusted program, said computer readable medium comprising:

instructions for causing one or more processors to establish a limited environment, said limited environment comprising at least one mock resource;

instructions for causing one or more processors to execute at least a portion of an untrusted program within said limited environment; and

instructions for causing one or more processors to examine said limited environment after execution of at least said portion of said untrusted program to check for undesirable behavior exhibited by said untrusted program.

18. The computer readable medium of claim 17, where said limited environment precludes access to actual resources, which if altered or accessed by said untrusted program, may lead to undesirable consequences.

19. The computer readable medium of claim 17, wherein said limited environment comprises a shell in a UNIX operating system environment.

20. The computer readable medium of claim 17, wherein said instructions for causing one or more processors to examine said mock environment comprises:

instructions for causing one or more processors to determine whether said mock resource has been deleted.

21. The computer readable medium of claim 17, wherein said instructions for causing one or more processors to examine said mock environment comprises:

instructions for causing one or more processors to determine whether said mock resource has been renamed.

22. The computer readable medium of claim 17, wherein said instructions for causing one or more processors to examine said mock environment comprises:

instructions for causing one or more processors to determine whether said mock resource has been moved.

23. The computer readable medium of claim 17, wherein said instructions for causing one or more processors to examine said mock environment comprises:

instructions for causing one or more processors to determine whether said mock resource has been altered.

24. The computer readable medium of claim 23, wherein said mock resource has a parameter associated therewith which changes when said mock resource is altered, and wherein said instructions for causing one or more processors to determine whether said mock resource has been altered, comprises:

instructions for causing one or more processors to determine whether said parameter has changed.

25. The computer readable medium of claim 24, wherein said parameter is a
5 time value indicating when said mock resource was last updated.

26. The computer readable medium of claim 17, wherein said instructions for causing one or more processors to examine said mock environment comprises:

instructions for causing one or more processors to determine whether said mock
10 resource has been accessed.

27. The computer readable medium of claim 26, wherein said mock resource contains one or more sets of content, wherein said untrusted program executes in a particular portion of memory, and wherein said instructions for causing one or more
15 processors to determine whether said mock resource has been accessed comprises:

instructions for causing one or more processors to search said particular portion of said memory for at least one of said one or more sets of content.

28. The computer readable medium of claim 17, further comprising:
20 instructions for causing one or more processors to provide information indicating behavior exhibited by said untrusted program.

29. The computer readable medium of claim 28, wherein said information comprises indications of undesirable behavior exhibited by said untrusted program.

30. The computer readable medium of claim 17, further comprising:
5 instructions for causing one or more processors to determine whether said untrusted program has exhibited undesirable behavior; and
instructions for causing one or more processors to, in response to a determination that said untrusted program has exhibited undesirable behavior, take corrective action.

10 31. The computer readable medium of claim 30, wherein said instructions for causing one or more processors to take corrective action comprises:

instructions for causing one or more processors to delete said untrusted program.

32. The computer readable medium of claim 30, wherein said instructions for
15 causing one or more processors to take corrective action comprises:

instructions for causing one or more processors to provide a warning to a user.